MISSOURI BOTANICAL GARDEN

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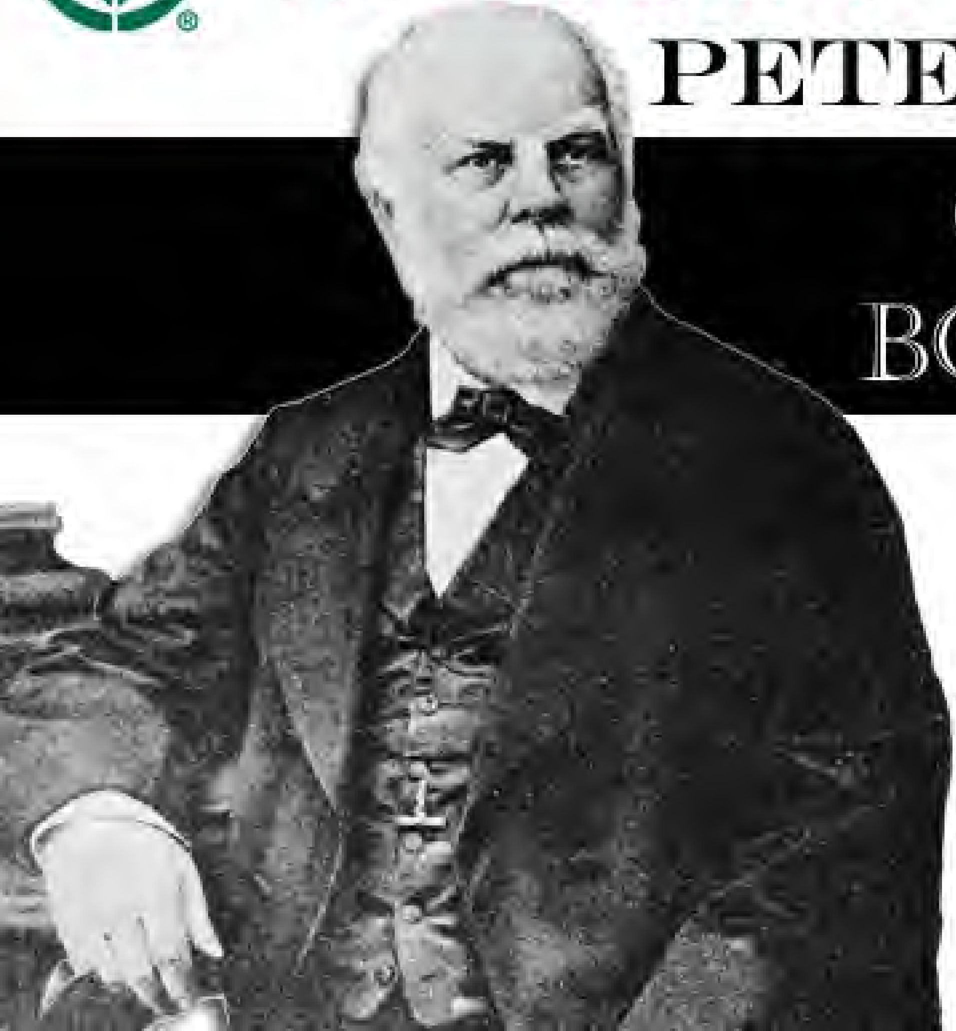
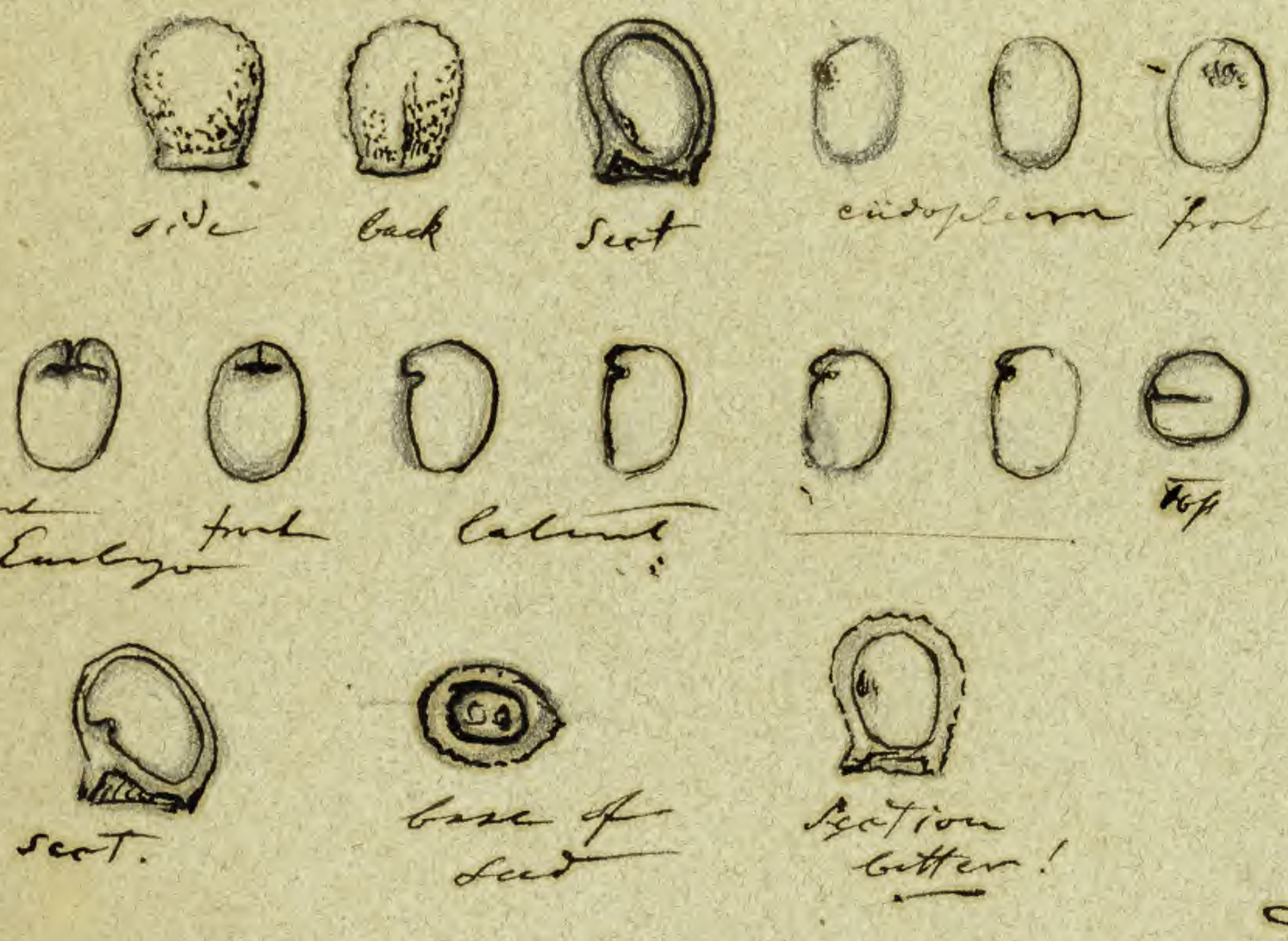


GEORGE ENGELMANN BOTANICAL NOTEBOOKS

Pagination Note:
Since many of the items lack a specific page number, the page number displayed online refers to the sequentially created number each item was given upon cataloging the materials.

Echinopsis

Frankfurt Febr. 1857



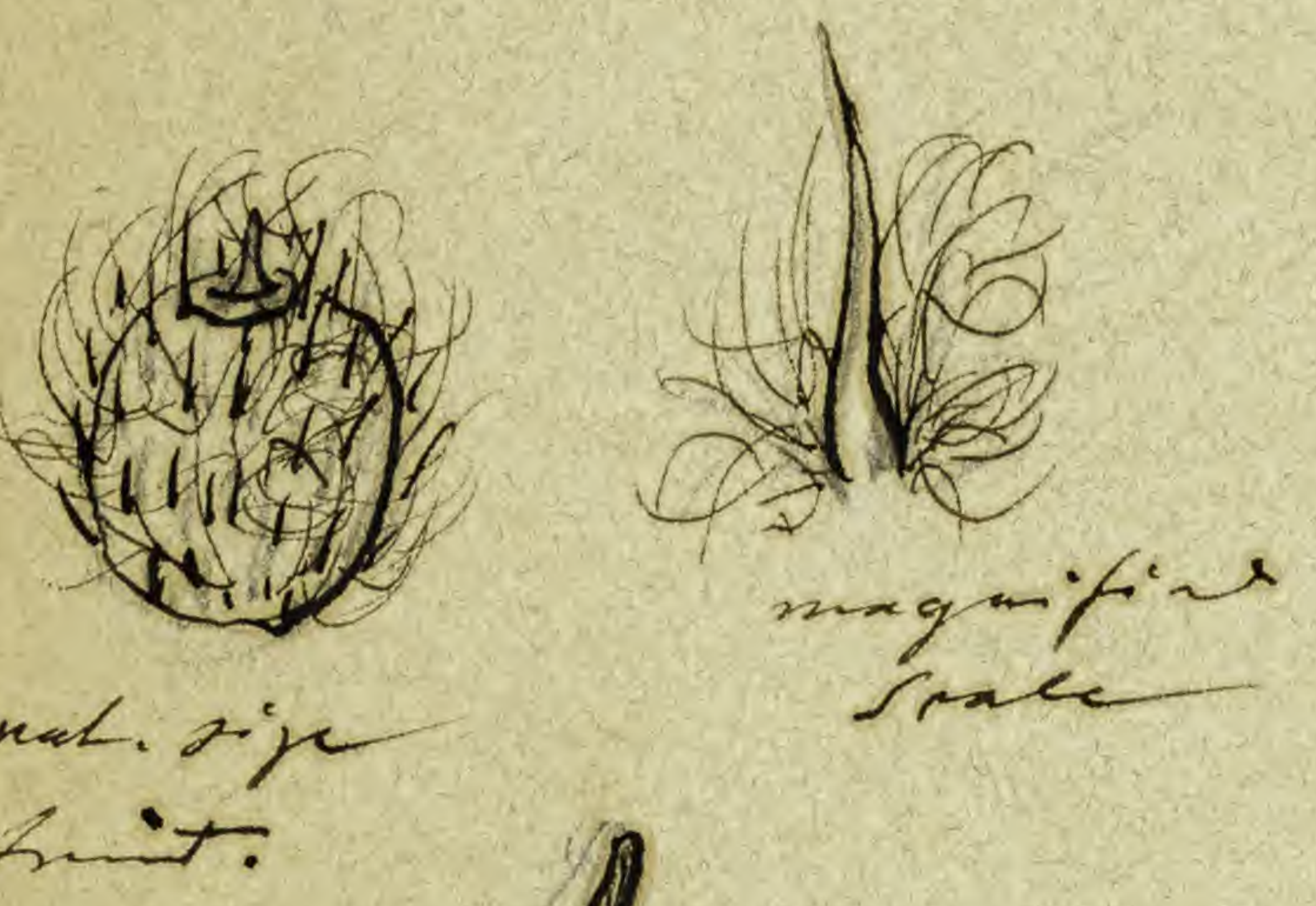
Echinopsis De Caisniana Coll Jacobi

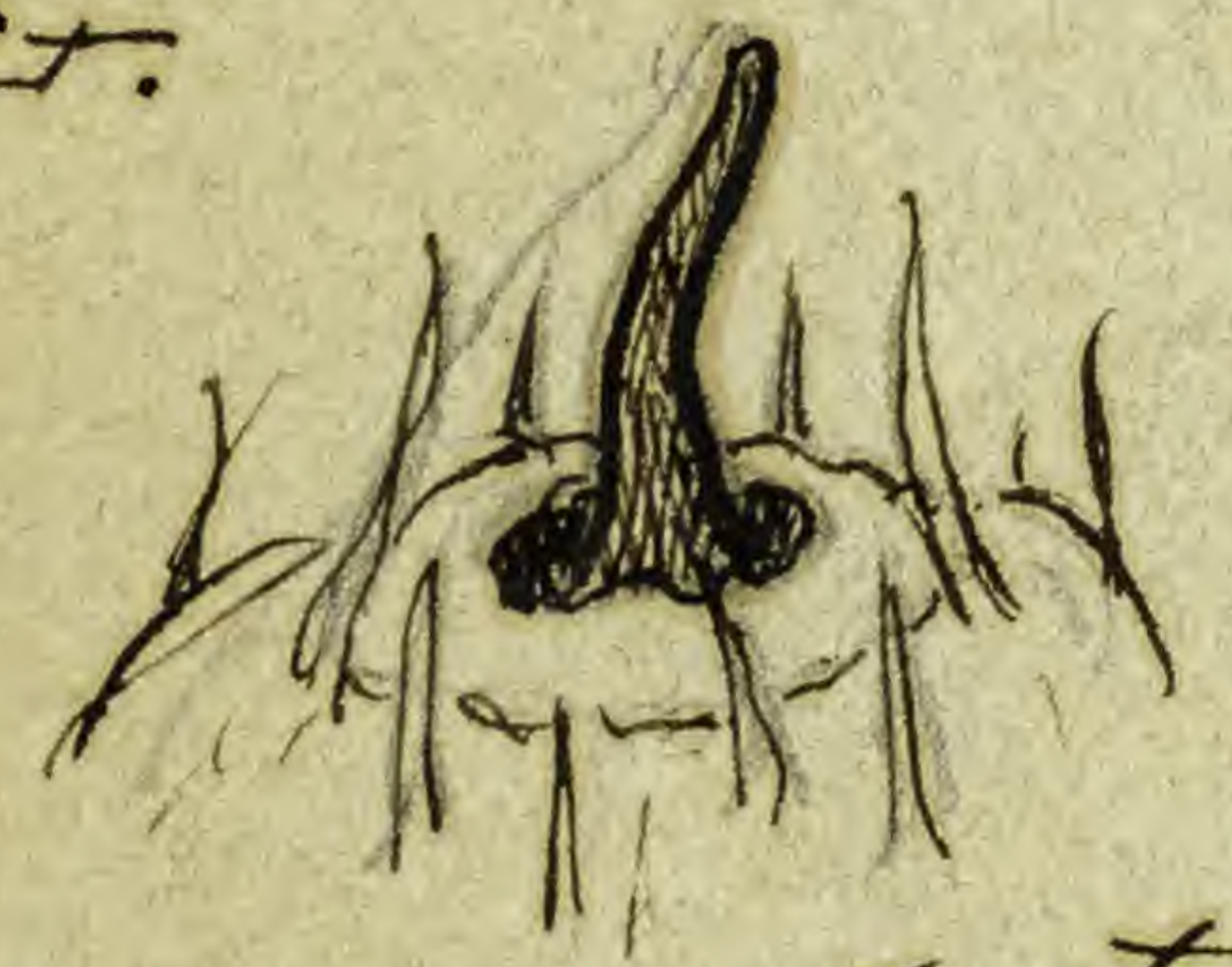
seed 0.5 – 0.55, testa black brittle, finely verrucose – obovate – subglobose, somewhat oblique; carinate at lower part of back; hilum basal, oval.

Embryo exalbuminous; slight thickening of endopleura; Cotyledons small hamate incurved, parallel in 6 or 8 seeds examined. Thereby distinct from Cerei !!

Embryo ovate, almost straight, but small cotyledons slightly hooked.

fruit green fleshy oval, or subglobose, covered with numerous scales which terminate into a rigid spinous point; bearing wool in the axils; flower deciduous; ~~style~~ base of style persistent and somewhat spinous.




base of style on top of fruit.

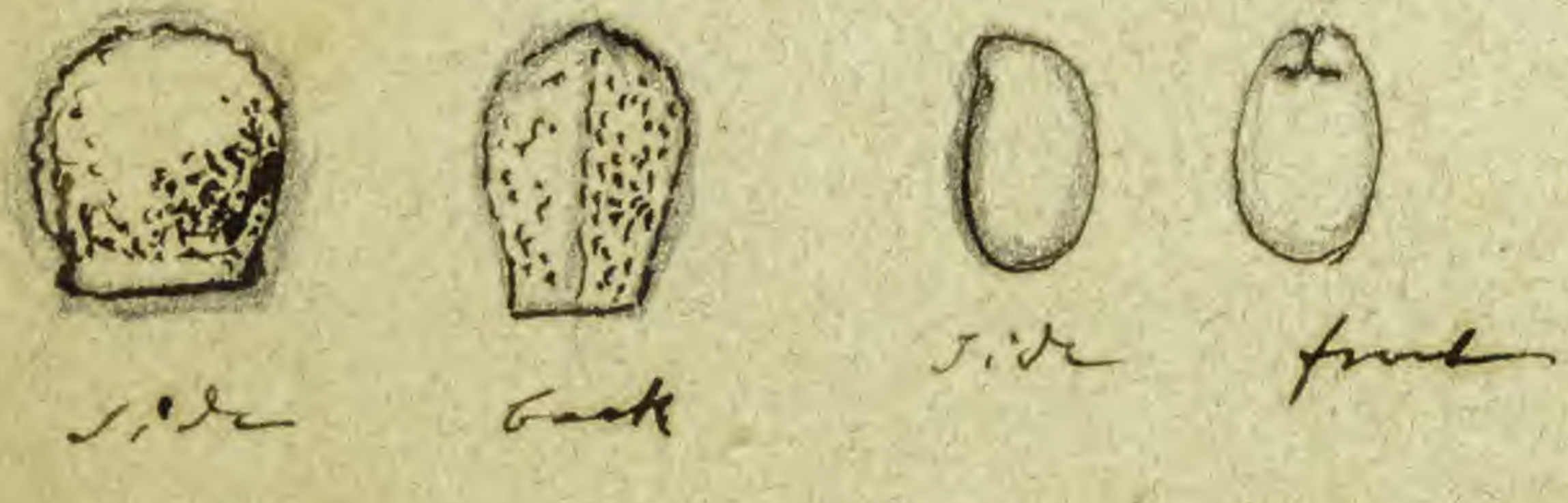
Ech. Eyriesii (Coll Jacobi)

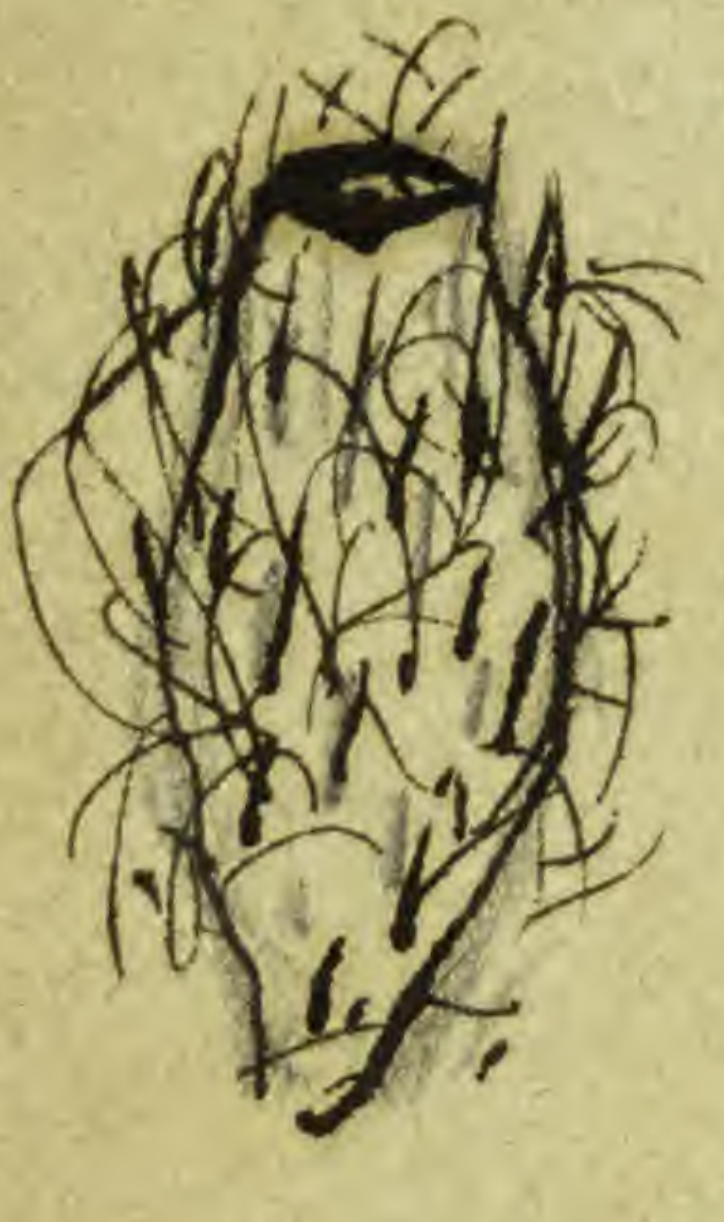
seed 0.6 or 0.55. slightly larger than the last. – finely verrucose, carinate on back

seed not ripe, brown, soft, but Cotyledons and embryo sufficiently well formed to determine the parallel position !

cotyledons less curved and more pointed than when fully ripe.

Fruit ovoid with deep umbilicus otherwise similar to last, with spiny scales etc





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Echinopsis multiplex our St Louis pale purple flowered plant
fr Hort Dyck 1857

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Hort bot Monac. Aug 11 1869

1635

Echinopses with very short spines, all apparently the same

E. Eyriesii
E. Zuccarinii
E. Decaisniana
E. Schelhasii

Echinopses with longer spines

E. oxygona —
E. multiplex —
E. Houttii Cels

E. Bridgesii is intermediate — a hybrid?

All of these are said to have white flowers.

(no, at least those marked — have rose flowers

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Kew Sept 1869

[illegible] Link & Otto
Echinopsis oxygona (sub Echinocacto) Hook
Bot Mag. 71. t. 4162 (1845.
spines 1–1½ c long — fl. rose
stigm. 14 yellowish — from South Brazil

Same in Bot Regist. 20 (1835) t. 1717
tube wide — petals rose — spines very short —

Ech. multiplex (sub Cereo), Bot Mag 66. 3789 1840
spines ½–2 c long — fl rose — petals wide, inner much shorter.

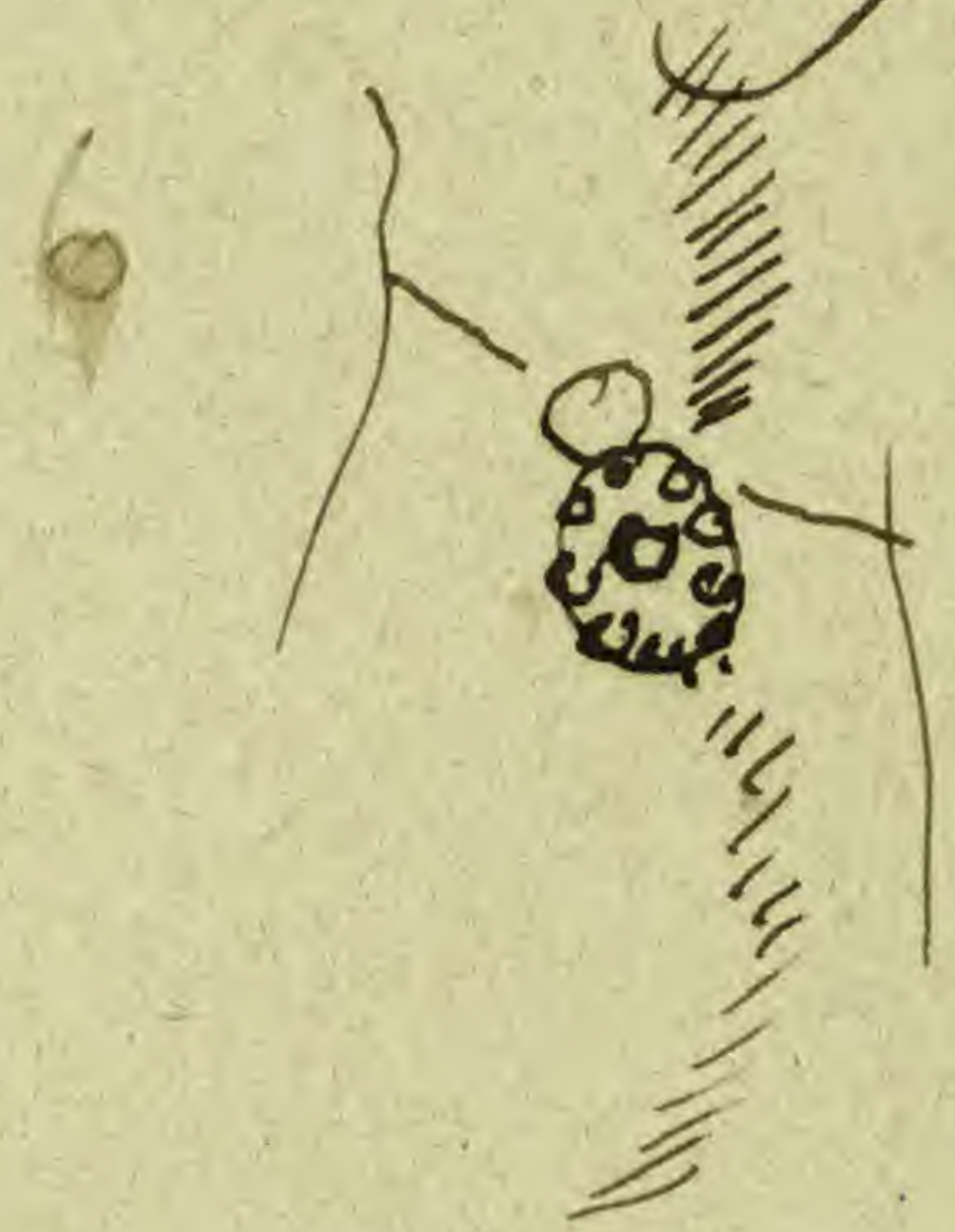
E. tubiflora (sub Echinocacto Bot Mag 65. 1839) t. 3627
spines, ½ c long flower tube narrow —

1636

Hort Pferdsdorff, Paris 2/4 69

Echinopsis Pentlandii is going to flower, areola woolly obliquely over the (old) spinebearing areola;

(Echinopsis Eyriesii occurs similar)



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Hort Cels march 18 1869

Echinopsis Pentlandii

a plant of thousands of forms and varieties, even in the original specimens.

size of plant, size shape and colour of flowers vary exceedingly

number and form of petals, – from broad obovate obtuse or emarginate to lance-linear and very acute, purple, crimson, rose, etc. –

Query: several allied species ~~and or allied~~ and perhaps hybrids between them?

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Edw Palmer 75

Hb. reg. Berlin Jan 1869

Echinopsis Sello 3192 . spines black straight rather stout, 1/4–1/2 inch long; flowers 8–9 inches long.

All Echinopsis I find here in herb (Eyriesii, turbinata, Zuccariniana ~~and others~~ (cultiv.) and this native Brazilian species have the lower sepals terminating into a bristly spine, and usually the middle and even the upper sepals of tube also.

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Kew Sept 1869

Bot Mag. 1717

Echinopsis oxygona, ~~plant~~ similar to Eyriesii but fl. rose coloured, and with a much wider tube.

1640

E. campylacantha Pf. Bot Mag. 4567
with very stout long spines, yellowish larger ones curved up 7-8 c long;
fl. 15 c long, only 6-7 c wide very pale rose — ovary & tube like other Echinopses

E. cristata Salm. Bot Mag. 4687
stout spines, areolae deeply immersed between the cristae of the crenate ribs, fl. 20 c long 18 c wide, pale rose or in another form deep purple tube & ovary as in other species — areolae with black hairs in var purpurea Bot Mag 4521

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Hort Seitz, Prag. July 11 1869

Echinopsis achatina (Pentlandii var.

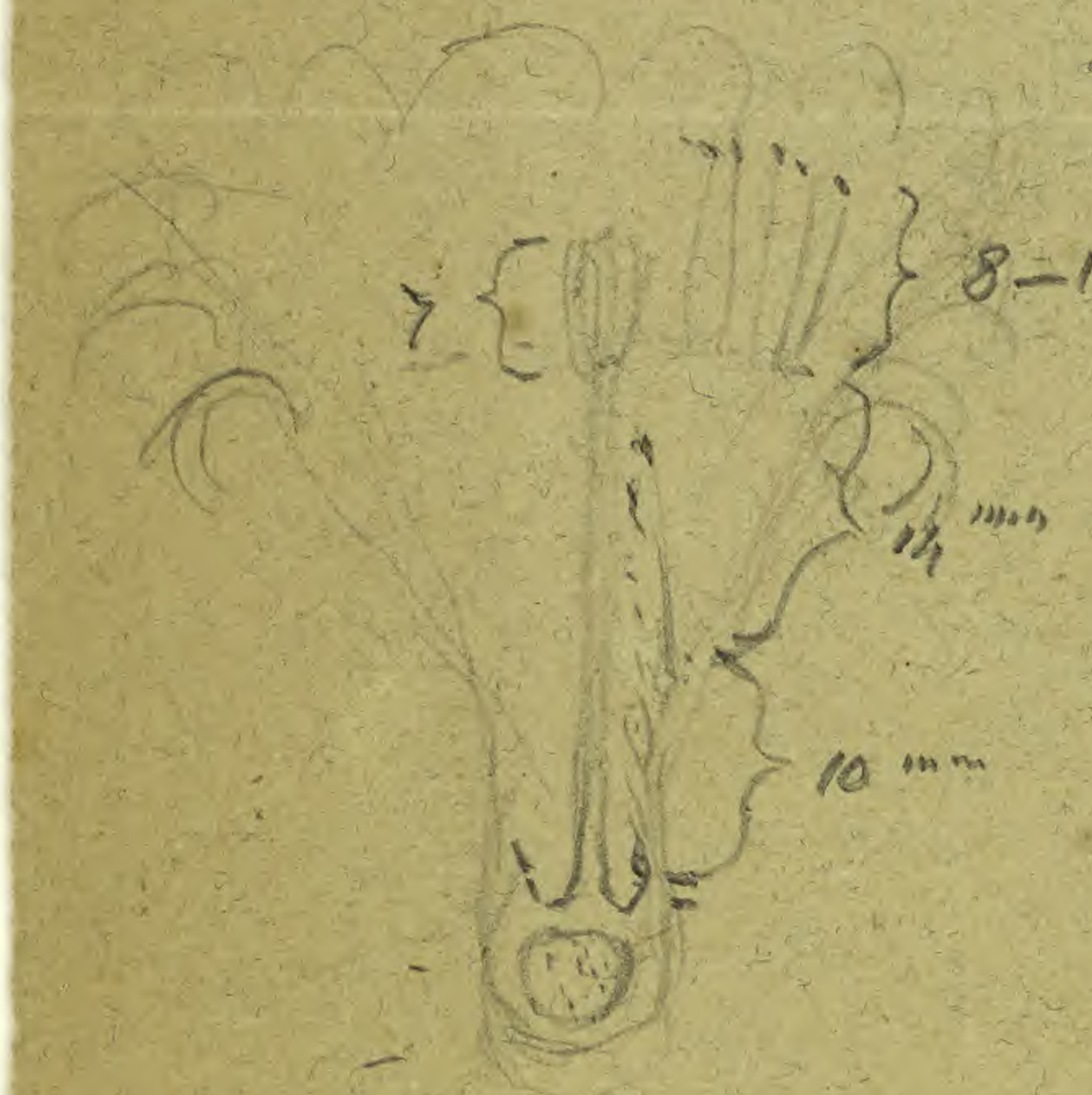
globose, 18 ribbed, ribs interrupted after the manner of Pentlandii

few 3–5 long curved spines, 1–1½ inches, curved upwards

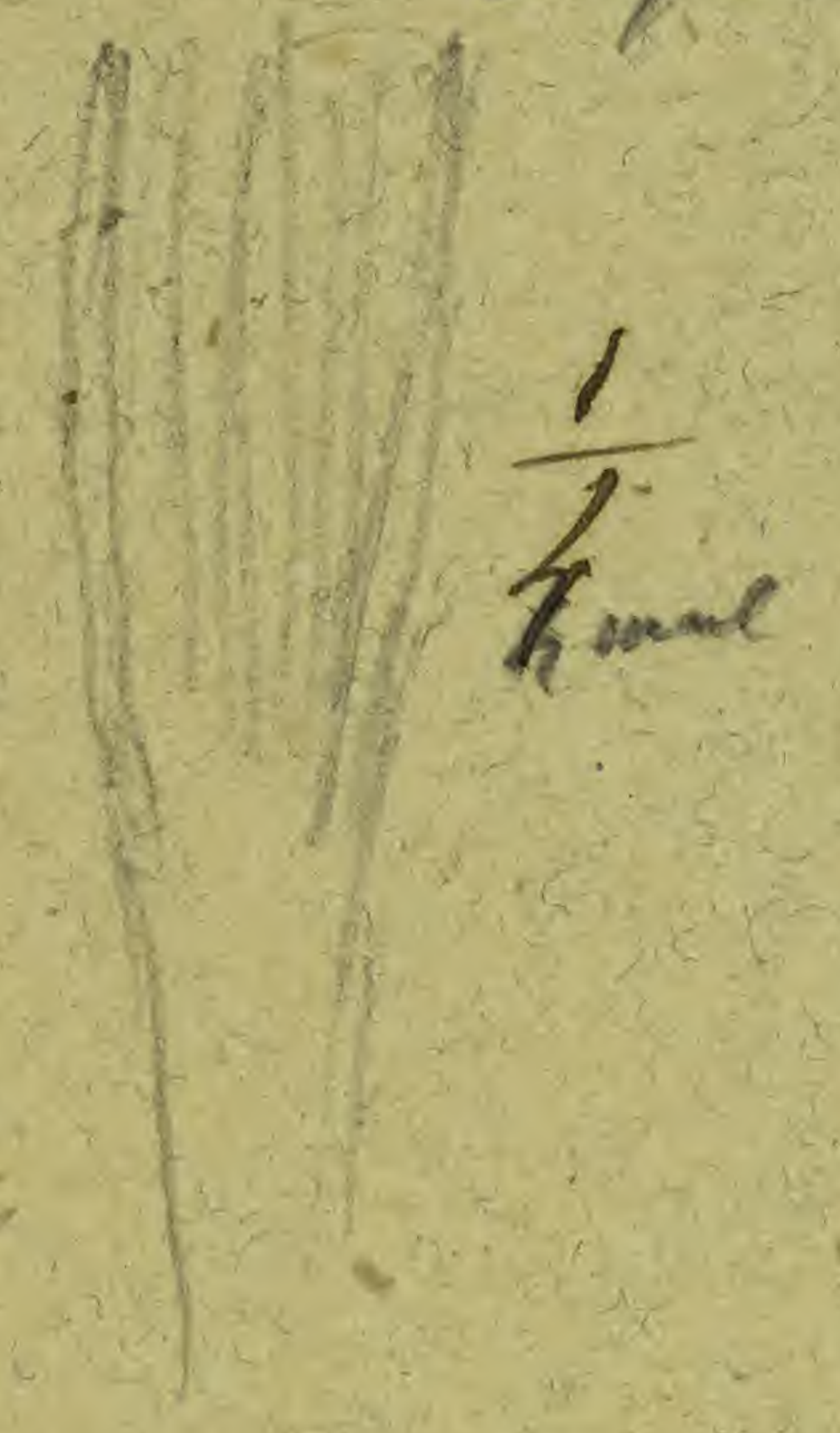
flower lateral, curved upwards 5½ inches long 4–4½ wide

Ovary with about 25 sepals subulate, on a prominent pulvillus.

Lower sepals of Tube long adnate, lanceolate gradually broader and longer about 30 in number ~~upper ones~~ 5–6 mm long, all with black wool in axil, Inner sepals more petaloid, without axillary hair about 17, linear oblong pointed, recurved; petals broader than sepals, spatulate, purple, retuse–emarginate, cuspidate about 16.



9 filiform erect stigmata 7 mm long yellowish
Style greenish - thick



1641

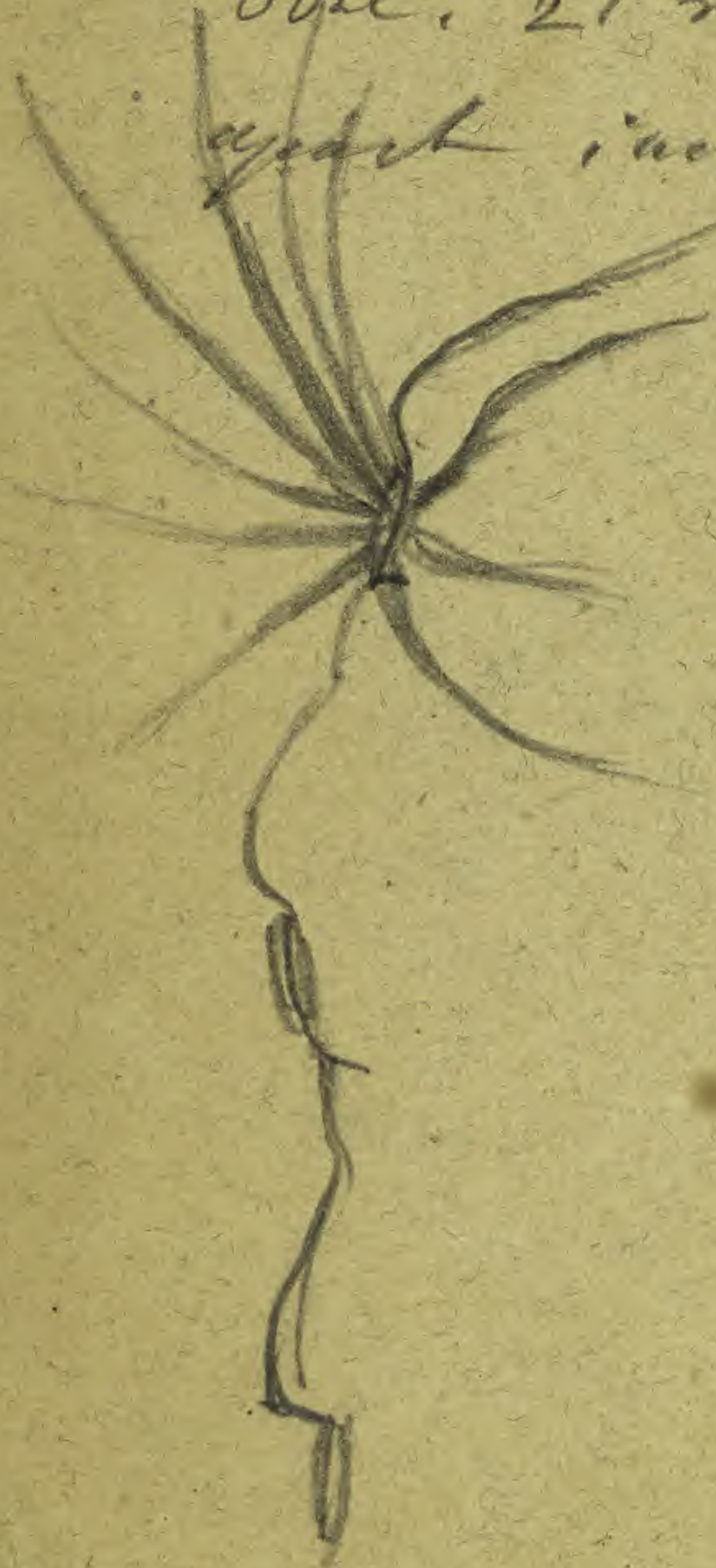
Hort Leitz, Prag July 1869

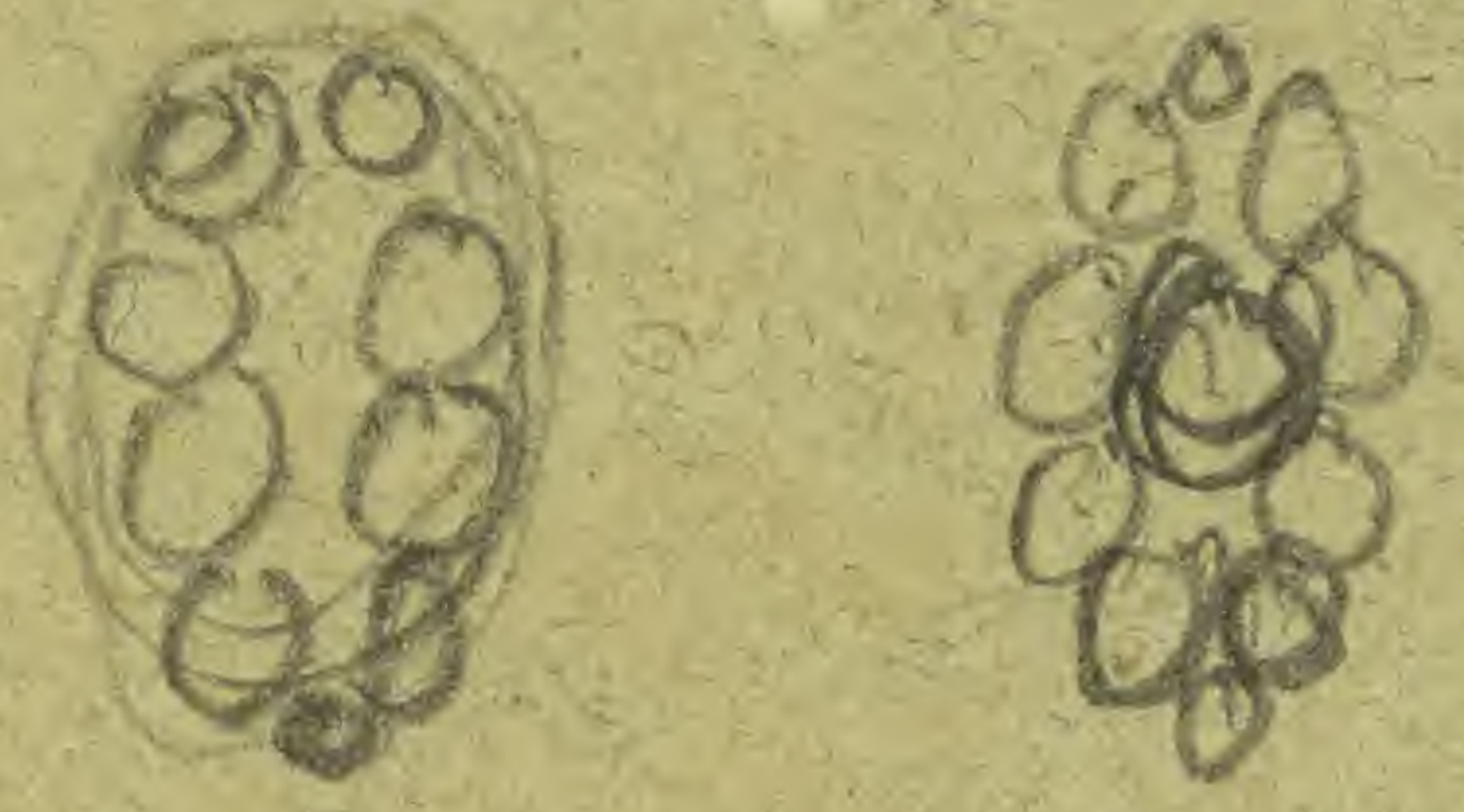
1642

Echinopsis rhodacantha

oval, 21 ribbed, 10" high 5" in diam. areolae oval, 1 inch apart immersed, ribs thick, grooves sharp, ribs somewhat interrupted

8–10 radial spines stout, curved, flexuous often one central one similar





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Echinopsis tricolor 1643 Hasseloff ~~Erfurt~~ /68

flower purple rose, open in daylight 2 1/4 inches long,
2 inches wide;
ovary globose with about 21 tubercular pulvilli bearing
loose white wool in the axils of small subulate sepals
35–40 sepals of tube, about 15 inner sepals purplish
as many rose purple petals white [illegible]
8 linear obtuse sem petaloid stig 55. coronal stam

Hort Hasseloff
Echinopsis tricolor Berlin June 1868
depresso-globosa, costae 14 acutae rectae interruptae
aculei 5–8; 3–5 inferiores albidi; 2–3 superiores
majores 1/2–1 pollicares inflexi 1–2 pollicares
1644

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Berlin
Frankfurt } 3t Cl. 88 Thl 185 = 273
Basel
Lyon
Marseille } 2t Cl
Neapel

1.33 4.42

13 Mk { 9 Thl 3.
6 fl 15 kr

dann 70 { 40 fr.
30 fr.

50 fr.

Frankfurt & Rhein
Berlin – Winter!
Italien bis Palermo (1 April!)
Paris
London & England

GARDEN
GEORGE ENGELMANN PAPERS

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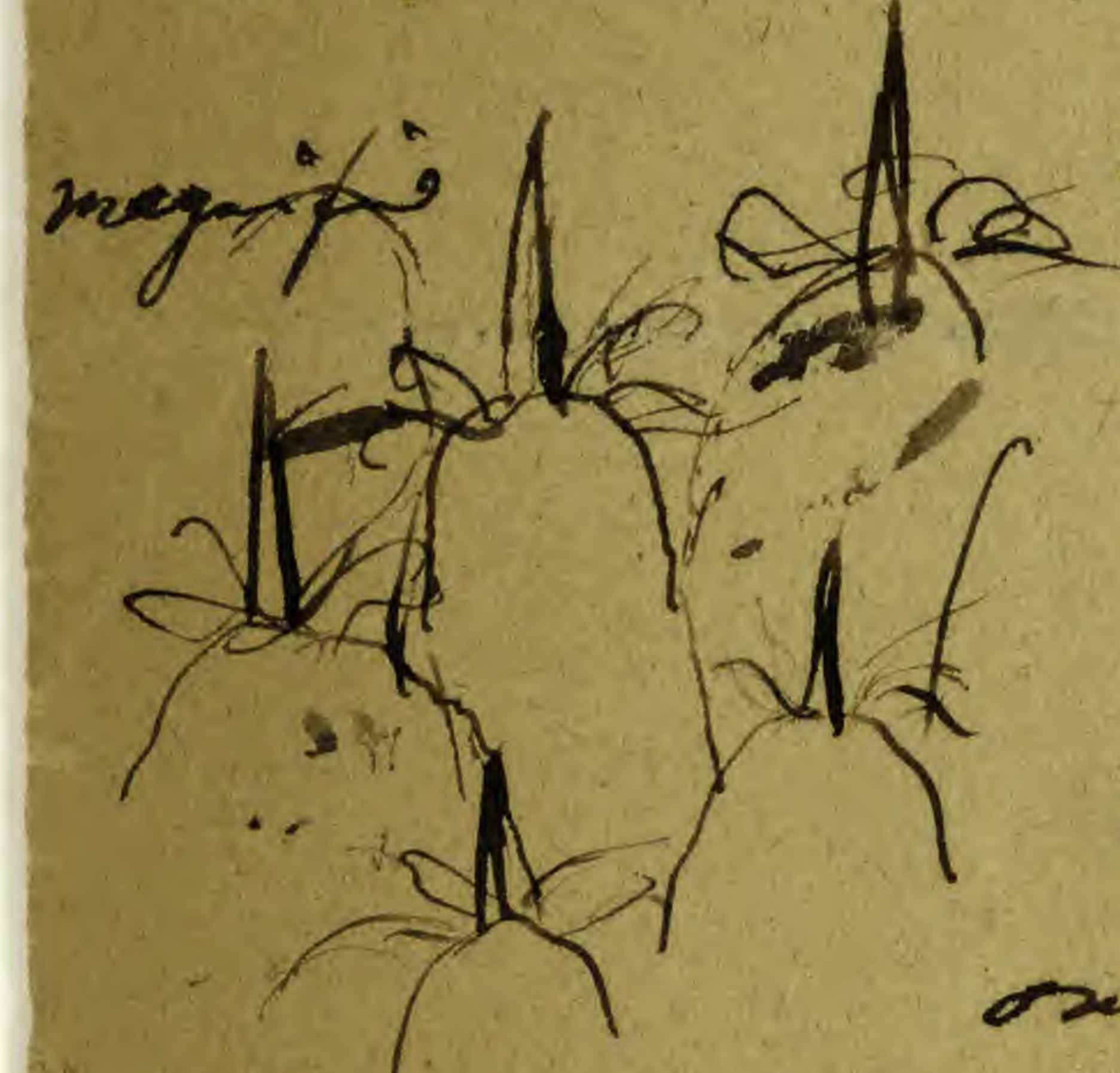
Echinopsis Maximiliani
said to belong to E. Pentlandii

at A. Haseloff's 13 Jan 1868
Berlin

plant 4 inches high, subglobose
ribs entire, uninterrupted or sometimes a little interrupted in the manner of E. Pentlandii, the tubercles being oblique one above the other

Spines 8 or usually 9 or 10, all radial, oft curved or flexuous, patulous, longer ones over 1 inch long. lateral ones longest, lowest shortest.

Flower 1½ inch long: , ovary as well as tube tuberculate, with flat tubercles; on upper end of each a subulate sepal, and loose wool in its axil



sepals in 3/8 arrangement;

1645

on ovary about 8 smaller ones, on tube 15-18 longer ones, uppermost triangular
innermost sepals in 2 rows, 8 outer ones shorter reddish, inner ones longer orange colored, lanceolate, acute; petals oval 8-10 shorter! outer ones acutish, inner obtuse! outer ones mucronate, inner ones quite obtuse! slightly denticulate; yellow at base, red orange upwards.

Lowest part of tube naked 1½-2 lines long
~~below few~~ staminate part of tube 5 lines long,
stamens few, especially below; no corona at all
outer stamens as long nearly as inner petals
Style shorter than stamens; stigmata [illegible] linear-filiform, erect, pale greenish-yellow; ovules
over

on long funiculi, seeds united at base.

Flower apparently open in middle of day closing in evening.

Can it be a hybrid of C. Pentlandii and something else?

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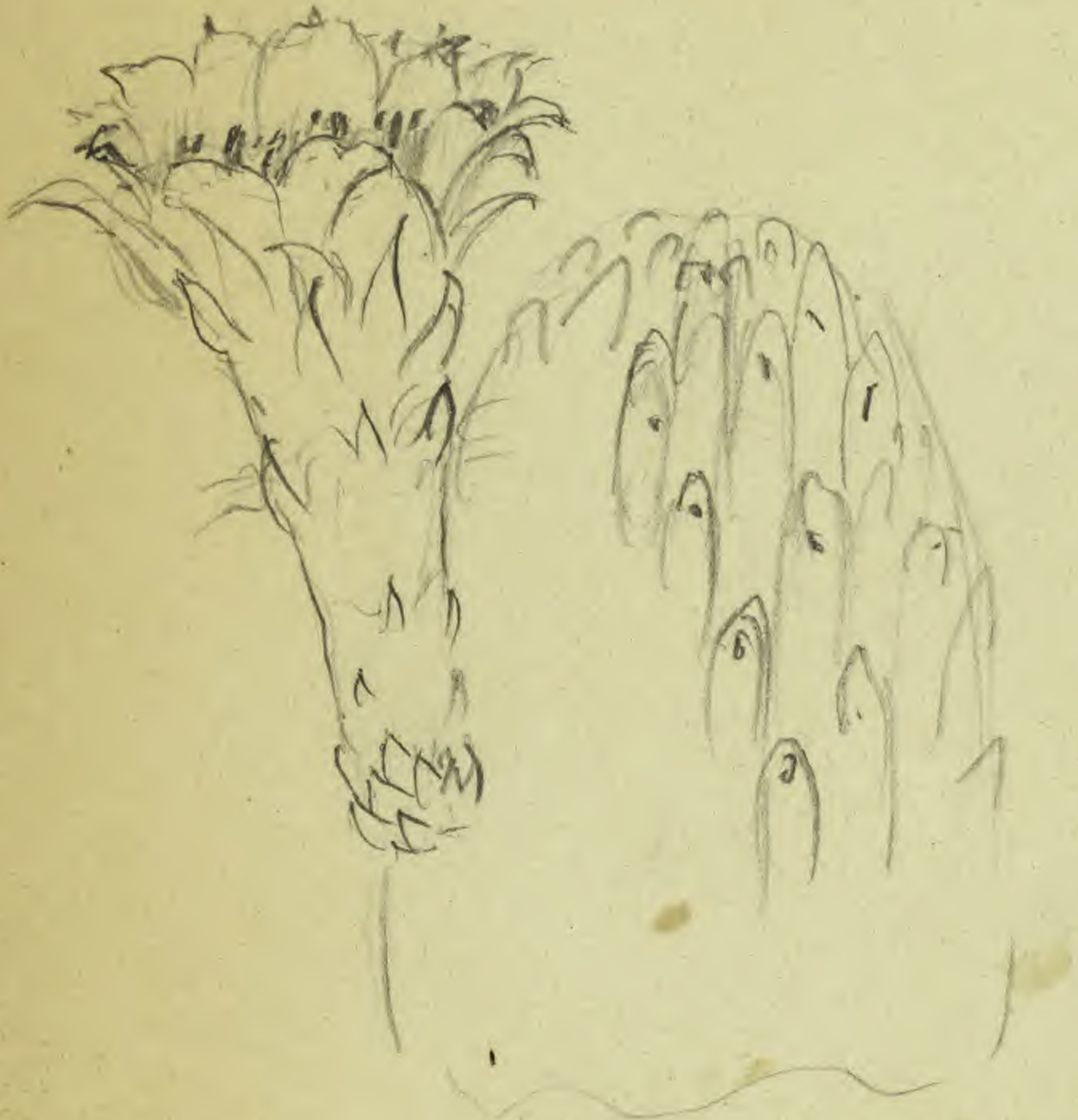
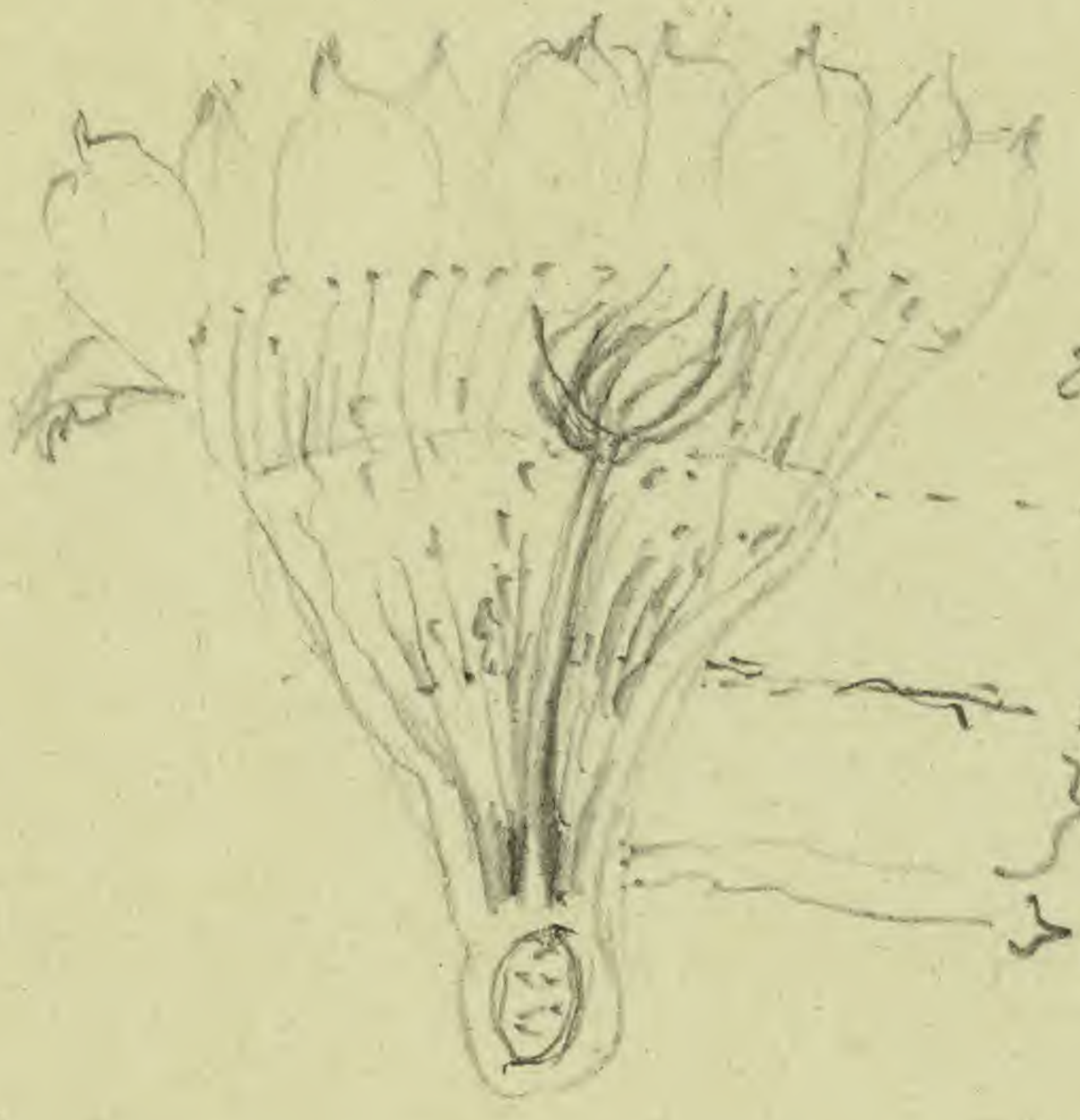
Echinopsis Pentlandii

Berlin June 8 1868
Dr Poselger's Garden
d. Dr Poselger





1646

Flower 1 3/4" long, said to be open day and night

Ovary 3 lines long, with about 12 fleshy subulate appressed scales, bearing white and black loose wool in the axils

Tube 12–14 l. long with about 18 scales, lower ones similar to those of the ovary, most of them with white and black wool in the axils; the 8 upper ones are more petaloid

Petals about 18 in 2 series, crimson, oblanceolate obtuse cuspidate or inner ones mucronate

Tube naked inside for only 1/2 or 3/4 of a line

fastigiate stamens attached to tube about 4 lines then a naked space of the same breadth, 4 lines, below corona of nearly 60 stamens, which are about 3 lines long; greenish – pale – yellow

Style greenish, reaching to base of coronal stamens then dividing into 8 filiform – subulate acute patulous, pale little one-sided stigmas.

Ovules on ~~a rather~~ funiculi (several often united near base) of twice their own length

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Echinopsis Warszewiczii Poselger in Hort.

1647

Hort. Haseloff July 1st 1868

ex sem. Warszewiczianis vulgo Berolini seminibus Bolivianis ? (s. centro-Americanis ??)

Stem simple, cylindrical, 5-6 inches high, 2 inches diameter.

Ribs 12 straight, continuous (not obliquely interrupted as in the allied E. Pentlandi), but with deeply immersed areolae – therefore crenate.

Areolae 8 lines apart.

6-7 radial spines lateral and inferior, none or scarcely any upward, 3-4 lines long, pale ash or darkish upwards.

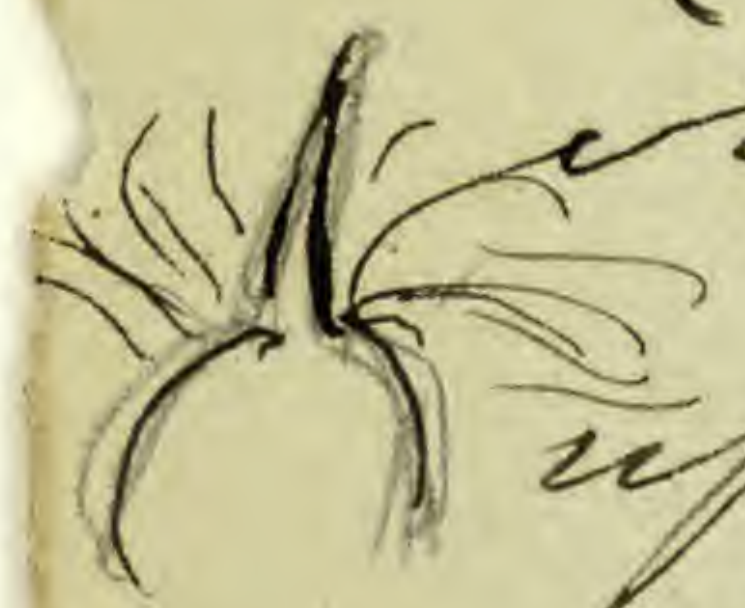
1 stouter longer central spine, 10-12 lines long, brown or dark, upper ones directed upward, lower, older ones, standing straight out — Rarely a second shorter spine above the first, directed upwards.

Flower about the middle of the plant, therefore from areolae at least 2 or 3 years old; 2¼ inches long, not more than 1½ inches wide in full sunshine, not fully closed at night or in dark weather.

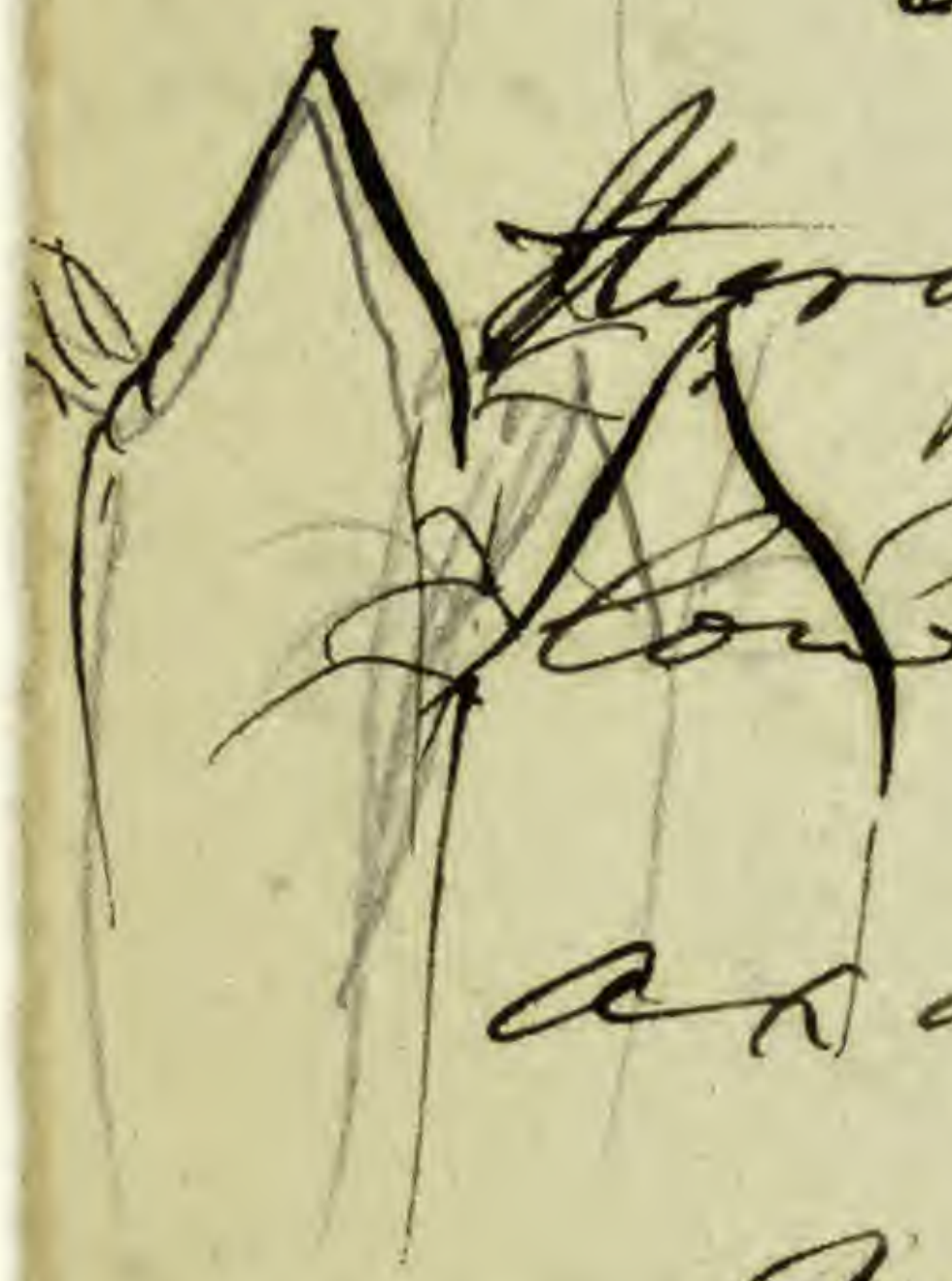
2

6 lines in diameter — in 8/13 arrangement

Ovary globose with 25–30 tuberculated pulvilli each bearing a subulate sepal, and some wool in its axil – lower ones as usual much smaller upper ones larger; most of them less than a line in length

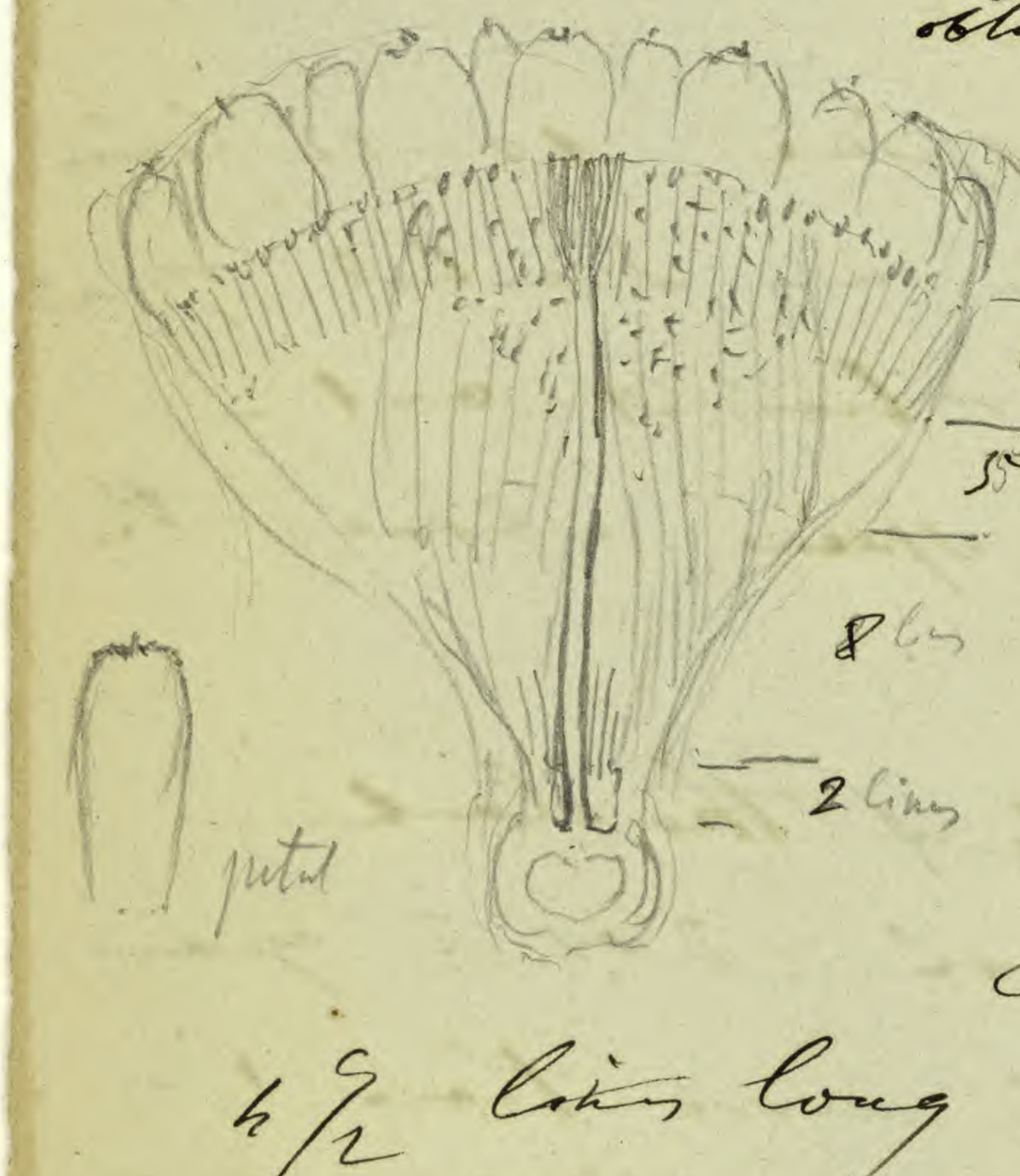


About 20 sepals of tube; long adnate, tube therefore angular; free part of sepals 3angular lower ones with white & black wool in axils, just as those of ovary



Upper or inner sepals gradually larger and petaloid, purple, broadly linear oblong, mucronate about 15 in number,

Petals as long as inner sepals obovate oblong obtuse, denticulate or emarginate, mucronate, 8 to 12 in number; scarlet



2 lines of lower part of tube naked, nectariferous; 8 lines then staminiferous, 5 lines naked, below the corona, and staminal corona consisting of about stamens 4½ lines long; anthers orbicular oval;

Style like filaments pale greenish yellow, 7 filiform, almost erect stigmata about 4 lines long, as long as stamens.

fruit said to be 'brown purple tubercular, like a plum, fleshy' and pulpy.

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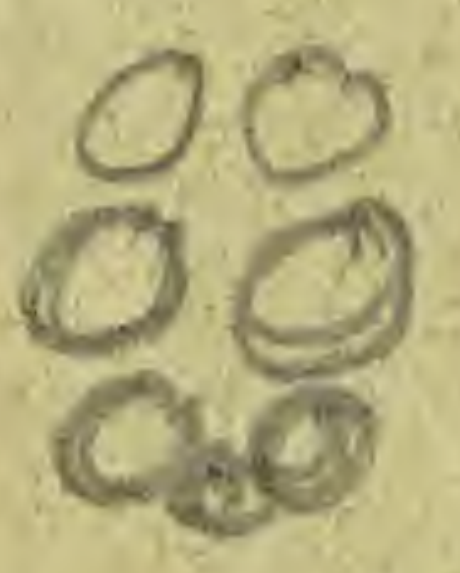
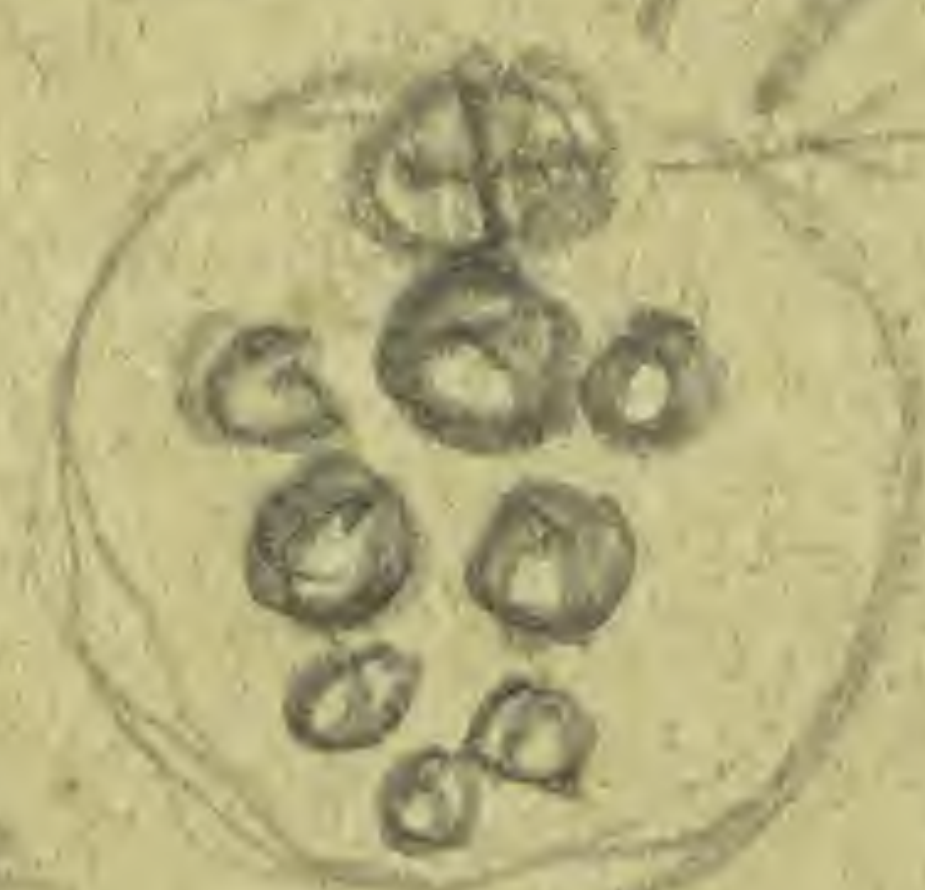
Brg, July 10th 1869 at Hanke's

Echinopsis cinnabarina
flower and tube in size and shape much like Ech. texensis,
Oval, flat topped 5" high 4" dia
tubercles in 16/42 or rather more, 26/68 — forming ~~Knobs~~ forms even more
prominent than in C. reductus; young tubercles spineless disc
spines ½ inch, recurved,  stout 7—8,

Flower from older part of plant 2 inches from top
Many buds present, sepals subulate, green, no bristles
at end, those of tube oval obtuse — all with numerous
brown wool in axil Stigma said to be yellowish
flowers appear apparently on upper part of areola —
within the wool of same 

Flower said to be open only one day, Morning to Evening
never open again

1648

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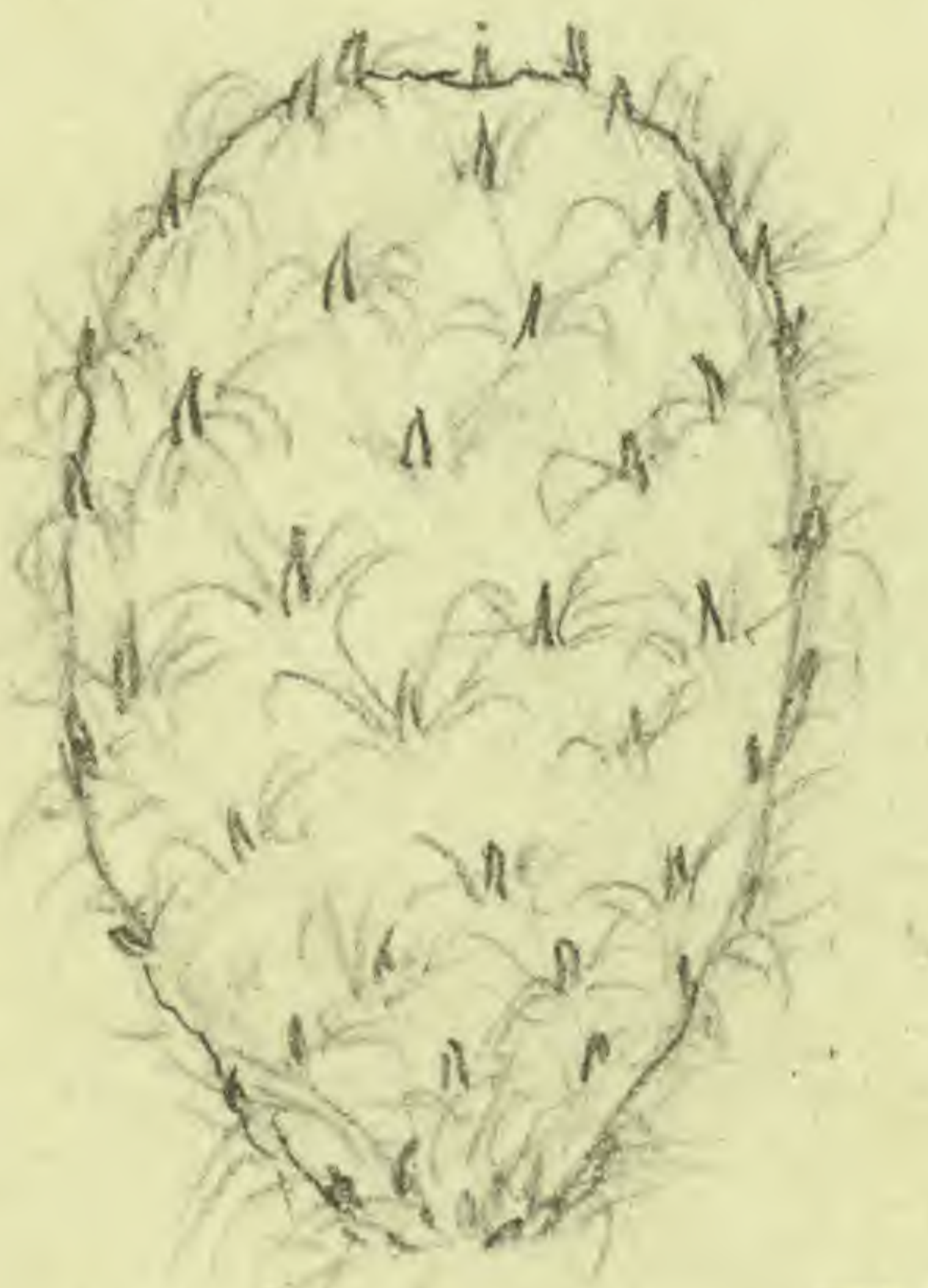
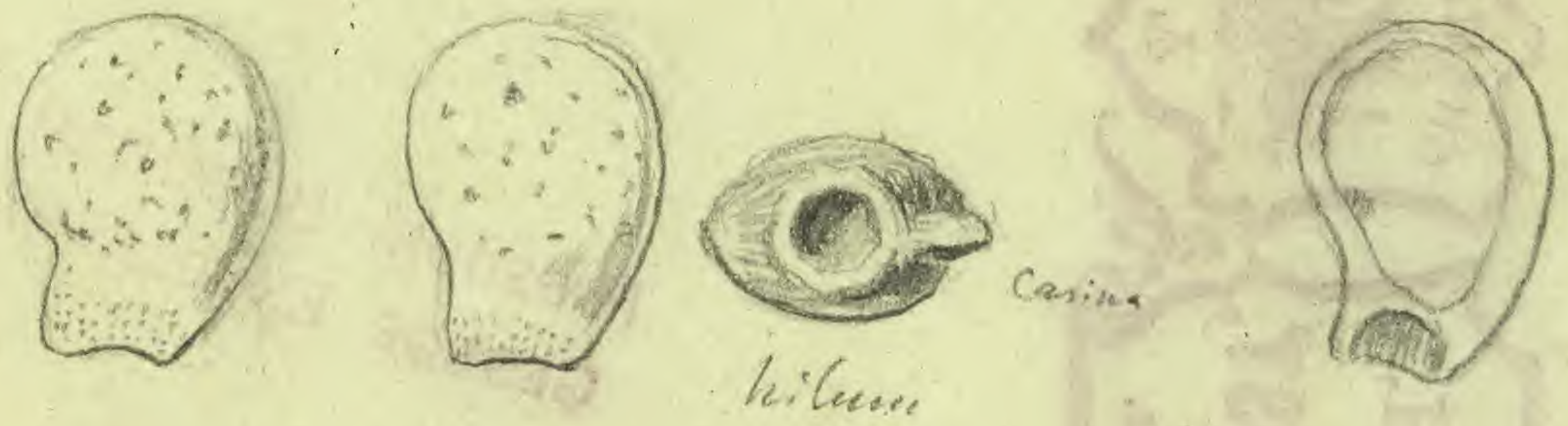
Echinopsis salpigophora Lem

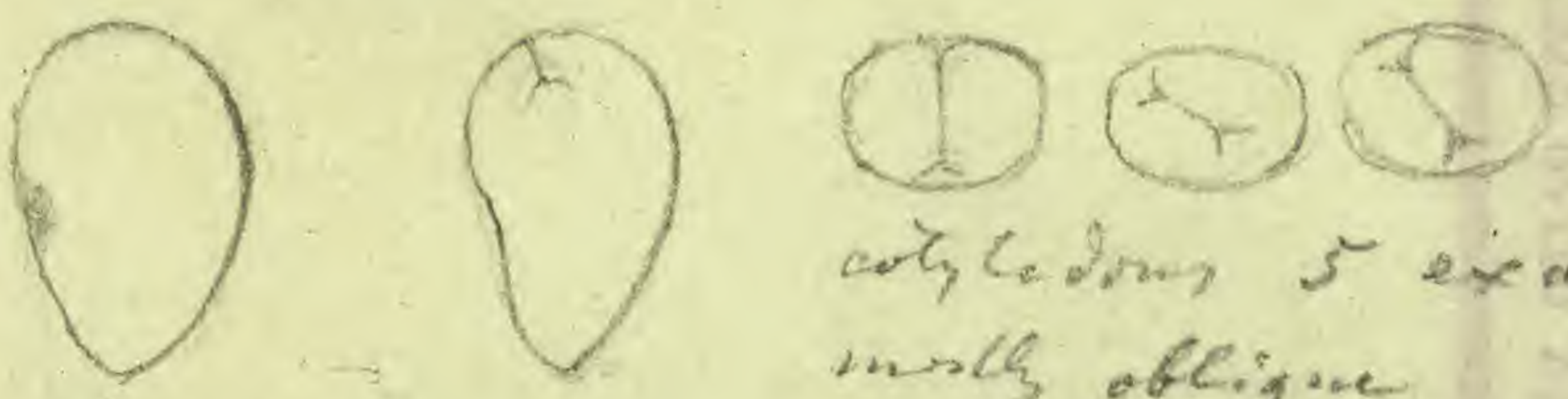
Agassiz leg. in Patagonia

Octob 9 1872

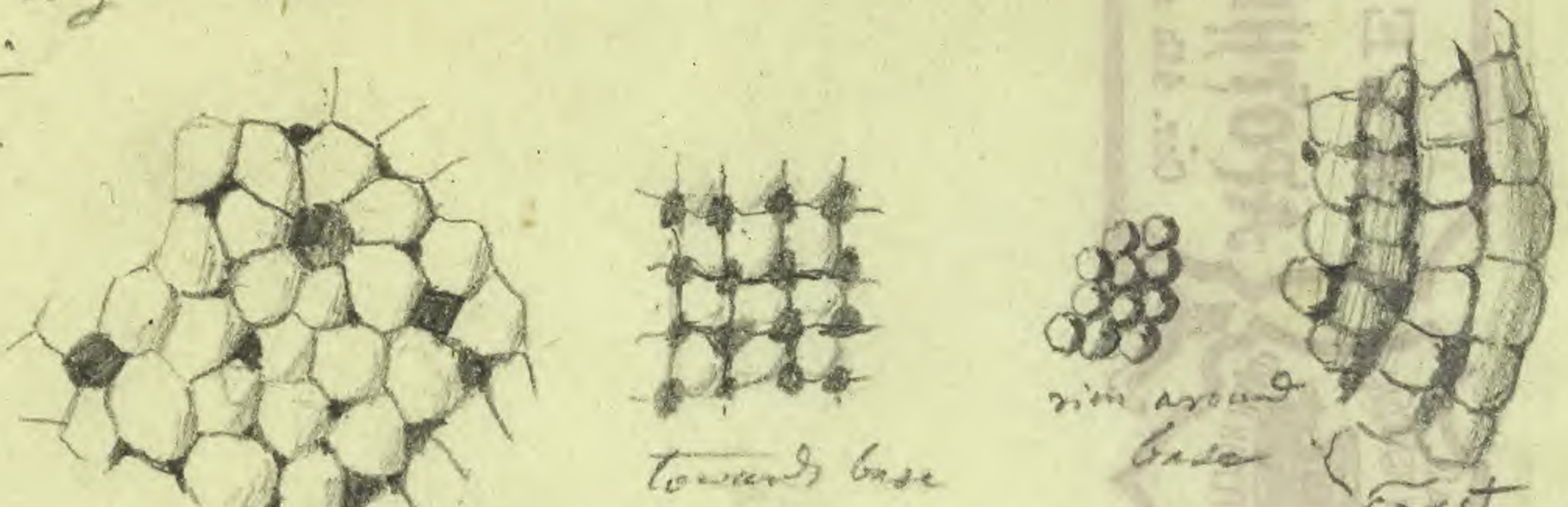


fruit as restored about 80 or 100 hard almost pungent subulate sepals, 2 mm long with abundant wool in axil white in circumference, with black more bristly fibres in Centre





cotyledons 5 examined mostly oblique



surface of seed ×60

flat tubercles leaving many lacunae between them

1649

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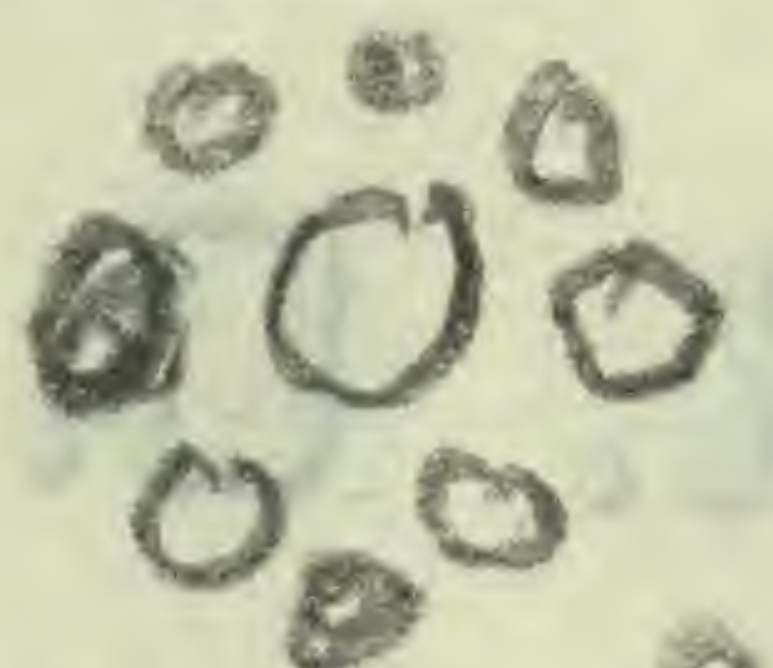
CHEMIST
A. L.

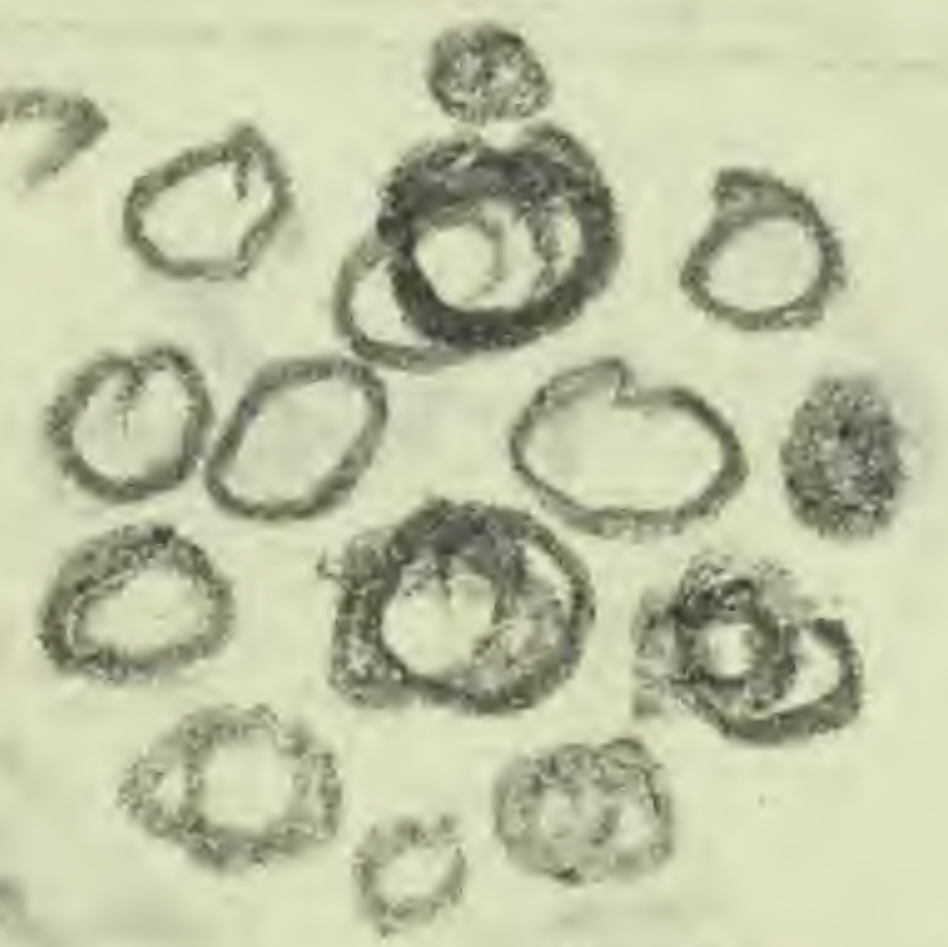
ALEX. LEITCH,
APOTHECARY & CHEMIST,
Cor. 4th and Olive Sts., St. Louis.

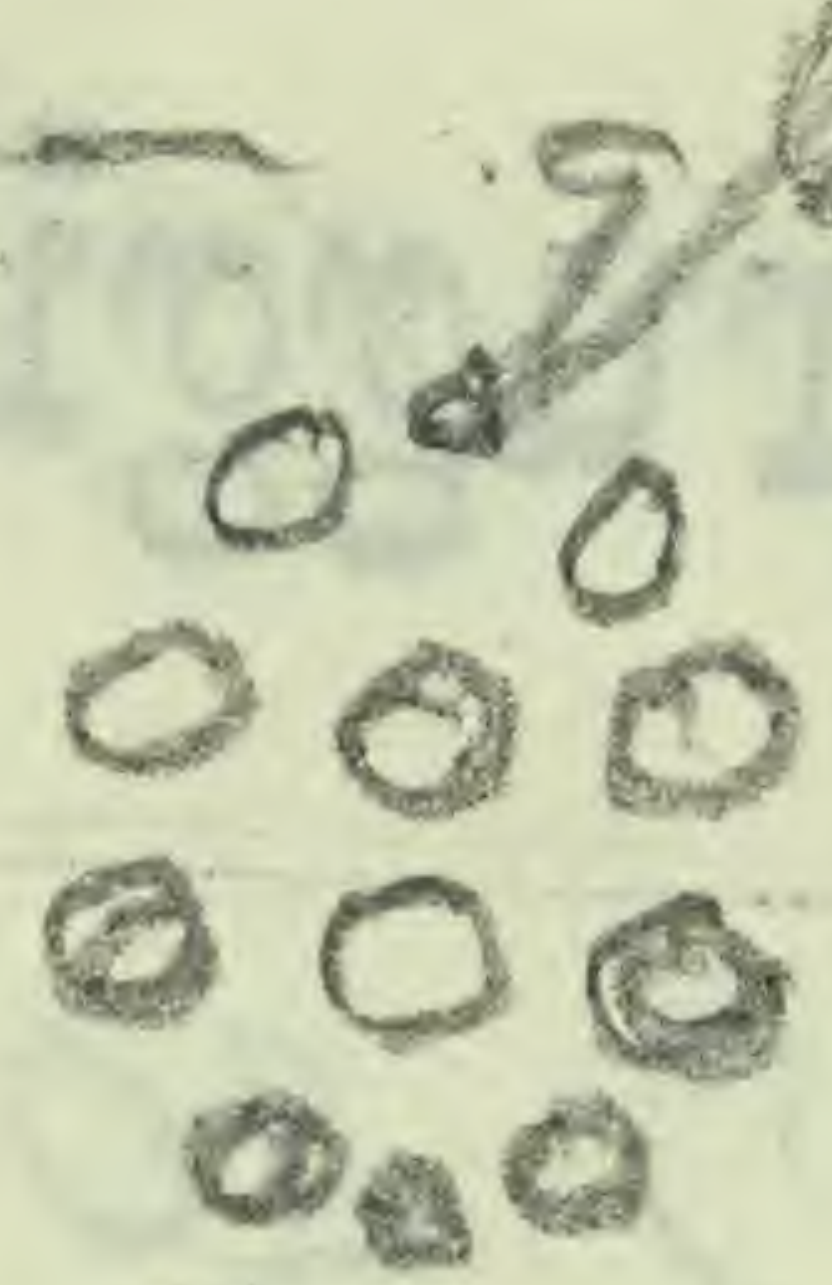
ALL THE NEW REMEDIES CONSTANTLY ON HAND

1, young plant, 1½ inch diam
globose 10 ribs 9 spines
central black, long, curved upward.



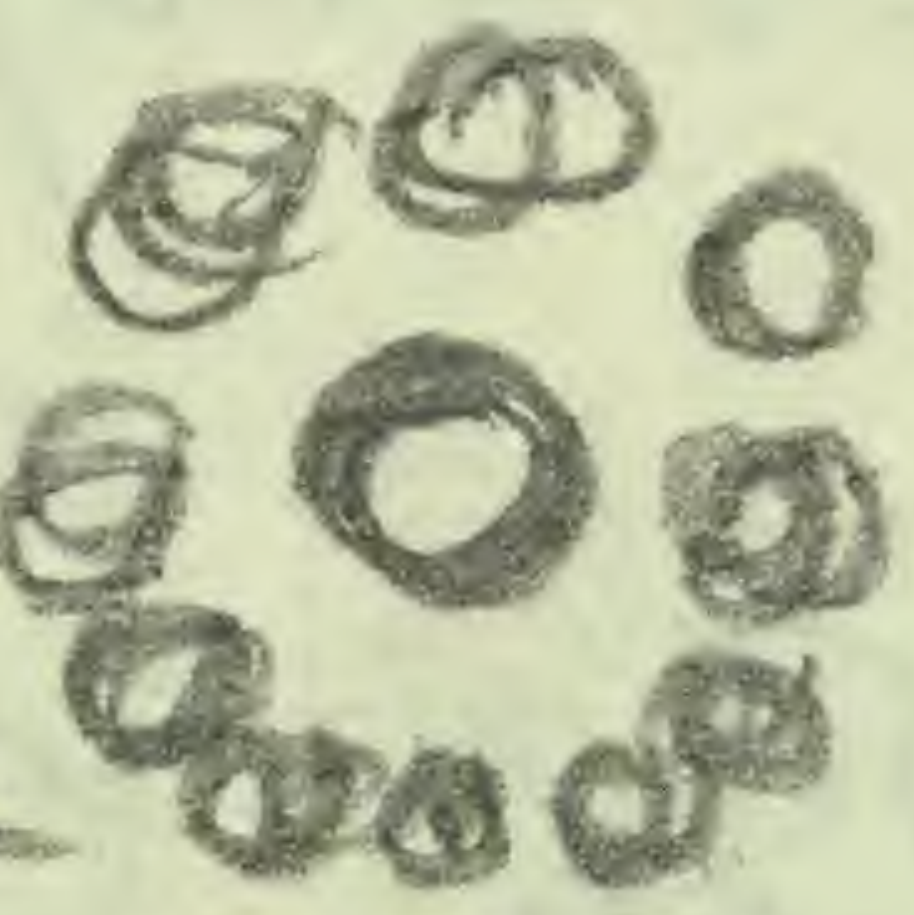
2, larger plant 5–6 inch diam glob.
12 ribs (from base!)
spines 12–14
or 2. 3 or 4 central



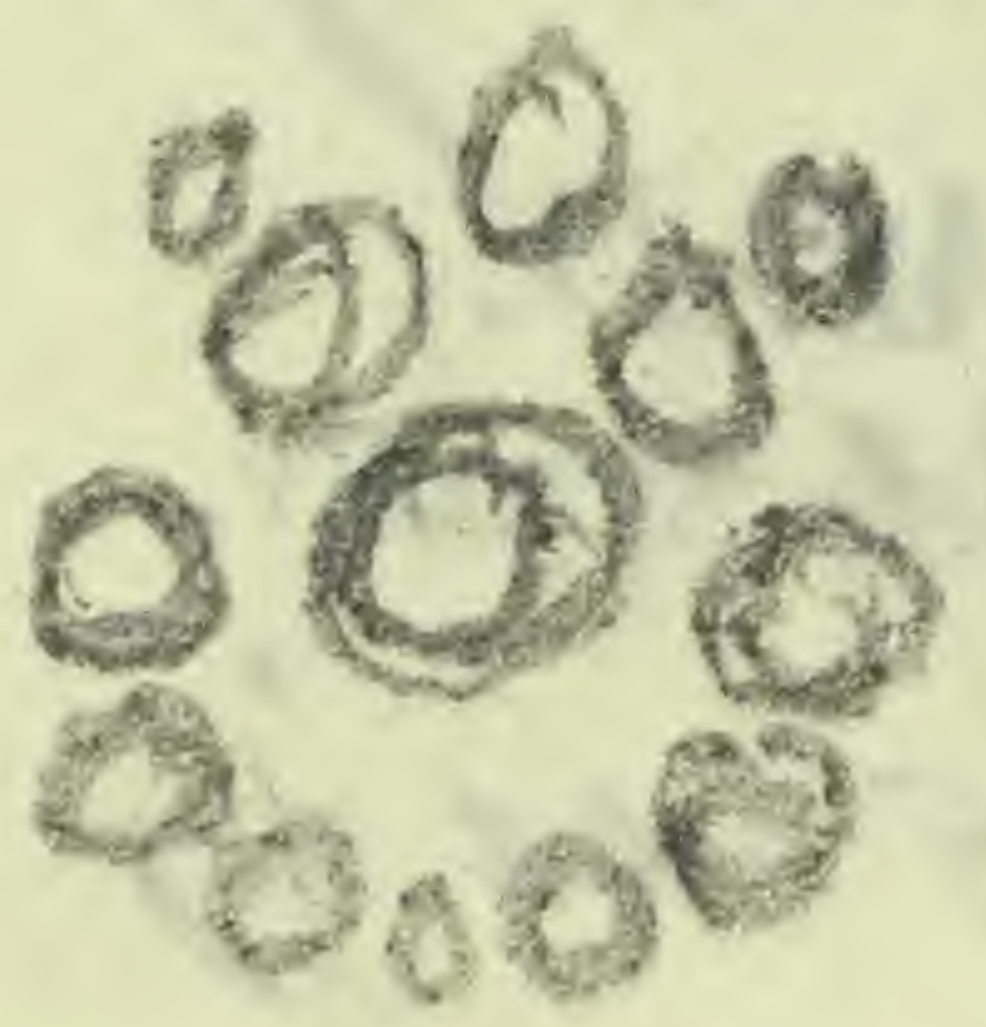


all long stout curved upward.
also upper radial ones stouter
curved upward

3, 1 foot high. 5½ inch diam
17 ribs 10 or 11 sp.
only 1 very ~~stout~~ dark, long
upper radial much longer than
lower radial & stout



4, 18" × 5½ 17 ribs
10–13 spines, 1–4 central



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PAPERS

over

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R. C. HARRISON,
508 Leffingwell Avenue,
Druggist & Apothecary

1650

5) 20" × 5" 16 ribs
5 spines as i 4
longest one 3½ inches

Echinopsis Salpigophora Lem
Lab p. 302
or
Ech. Campylacantha Pfeiff
Lab 305
both perhaps identical (Lab)

Cliffs of St Matthias bay
in East Patagonia
L Agassiz

G. F. ENGLEMAN, M.D.,
3003 LOCUST STREET.

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